RESPONSE UNDER 37 C.F.R. § 1.116 EXPEDITED PROCEDURE – EXAMINING GROUP 2155

Attorney Docket No. RSW92000141US1/5577-323

<u>PATENT</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Roberto DeLima et al. Conf. No.: 9743 Application No.: 09/825,078 Group Art Unit: 2155

Filed: April 3, 2001 Examiner: Benjamin R. Bruckart For: QUALITY OF SERVICE IMPROVEMENTS FOR NETWORK

TRANSACTIONS

October 10, 2006

MS AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

CERTIFICATION OF ELECTRONIC TRANSMISSION UNDER 37 CFR § 1.8

I hereby certify that this correspondence is being transmitted electronically to the U.S. Patent and Trademark Office on October 10,

Audra Wooten

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Date of Signature: October 10, 2006

REASONS IN SUPPORT OF APPLICANTS' PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

Applicants hereby request a Pre-Appeal Brief Review (hereinafter "Request") of the claims finally rejected in the Final Office Action mailed July 12, 2006 ("Final Office Action") and the Advisory Opinion mailed September 25, 2006 ("Advisory Opinion"). This document is submitted in support of the Pre-Appeal Brief Request for Review that is filed concurrently herewith along with a Notice of Appeal in compliance with 37 C.F.R. 41.31 and with the rules set out in the OG Notice of July 12, 2005 for the New Appeal Brief Conference Pilot Program.

No fee or extension of time is believed due for this request. However, if any fee or extension of time for this request is required, Applicants request that this be considered a petition therefore. The Commissioner is hereby authorized to charge any additional fee, which may be required, or credit any refund, to our Deposit Account No. 09-0461.

Claims 1, 2, 4, 14, 15, 6-12, 17-19, 21, 23-27, 29-30, 32-34, 37, 39, 41-45, 47-48, and 50-57 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 6,772,333 by Brendel (hereinafter "Brendel"). Claims 3, 13, 20, 28, 34, 38, and 46 stand rejected under 35 U.S.C. §103(a) as unpatentable over Brendel in view of U.S. Pat. Publication No. 20020019873 by Goldszmidt et al. (hereinafter "Goldszmidt"). Applicants submit that the rejections are based on a clear error in understanding the applied references, and that the Final Office Action and

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Advisory Opinion have failed to establish anticipation of the independent Claims 1, 19, and 37. Accordingly, Applicants request review of the present application by an appeal conference prior to the filing of an appeal brief. In the interest of brevity and without waiving the right to argue additional grounds should this Petition be denied, Applicants will only discuss the particular errors made in rejecting the independent Claims 1, 19, and 37 as anticipated by Brendel.

Independent Claim 1 recites (emphasis added):

1. A method of providing improved quality of service over a series of messages exchanged between computers in a networking environment that are related to a transaction, comprising:

determining one or more transactional quality of service ("TQoS") values to be applied to the related messages;

using the determined TQoS values when transmitting at least one of the related messages from a server computer to a client computer as a response message related to a request message from the client computer;

annotating a routing token of the response message with information reflecting the determined TQoS values;

transmitting the response message with the annotated routing token with the information reflecting the determined TQoS values from the server computer to the client computer;

receiving the response message transmitted with the annotated routing token-at the client computer; and

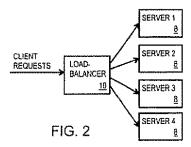
transmitting the TQoS values obtained from the annotated routing token from the client computer to the server computer with subsequent request messages which are each related to the response message from the server.

In rejecting Claim 1, the Final Office Action and Advisory Action contend that Brendel discloses each and every recitation of Claim 1 in the following sections of Brendel: col. 5, lines 27-50 and 45-50; col. 5, lines 45-50; col. 6, lines 9-25; and col. 11, lines 35-45. Applicants respectfully disagree, and submit that Brendel does not disclose at least the above-underlined recitations of Claim 1 and that, consequently, the Final Office Action and Advisory Opinion have failed to establish anticipation of Claim 1 and corresponding Claims 19 and 37.

Brendel is directed to a load balancer 10 that distributes client web information requests among many web servers within a "server farm [which] can have hundreds of individual server machines that are connected together by a local network". (See Fig. 2 of Brendel, below, and col. 2, lines 9-17).

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According to Brendel, "[r]equests from clients are received by an internet connection and sent to load-balancer 10[, which] assigns the request to one of many servers 8." (Brendel, col. 2, lines 19-21). The "assigned server 8 then receives the request and processes it[, and sends its reply] directly back to the client." (Brendel, col. 2, lines 21-24). "The server farm can use a single virtual IP address and thus appears to the outside user to be a single server." (Brendel, col. 2, lines 24-26).

Brendel seeks to address a potential problem when a load balancer attempts to route encrypted client requests to assigned servers in a server farm. Brendel describes that for encrypted client requests, the load balancer needs to use "encryption and decryption algorithms [which] are processor-intensive" and that "many simultaneous connections can [cause the load balancer] to suffer a significant performance degradation, perhaps even becoming unavailable at high load levels." (Brendel, col. 1, lines 27-33). Brendel seeks to avoid these problems by using the load balancer to assign a client to a server in the server farm, generate a server-assignment cookie that identifies the assigned server, and transmit an "encrypted-session identifier and the server-assignment cookie to the client." (Brendel, col. 6, lines 8-17). "The client stores the server-assignment cookie and ... sends the server-assignment cookie but not the encrypted-session identifier with each clear-text request to the server farm." (Brendel, col. 6, lines 18-21). The load balancer then uses the server-assignment cookie received with a client request to direct the request to the assigned server without the need to first decrypt the request. (Brendel, col. 11, lines 35-45, col. 6, lines 26-33, and col. 9, lines 37-56). In other words, Brendel is directed to streamlining routing decisions made by a load balancer using routing cookies which are transmitted to the client and then are returned by the client with subsequent requests.

Applicants submit that Brendel's routing of client requests within a server farm based on routing cookies has nothing to do with determining or using transactional quality of service ("TQoS") values, and submit that Brendel does not disclose at least the above-underlined recitations of Claim 1.

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The Final Office Action contends on page 3 that Col. 2, lines 43-50 of Brendel discloses determining transaction quality of service ("TQoS") values to be applied to related messages. The Advisory Action similarly contends on page 2 that Col. 14, lines 11-15 that Brendel is "concerned with quality of service transmission of information across a network". However, although Col. 2, lines 43-50 of Brendel mentions QoS by reciting that "other kinds of middleware are used for network management such as quality-of-service (QOS) or security," Brendel teaches away from Claim 1 by stating that "middleware can only look at the IP packets being sent and does not necessarily know which connections and sessions belong to the same user." Similarly, although Col. 14, lines 11-15 of Brendel again mention QoS by reciting that "for example, the invention could be used to combine clear-text and encrypted sessions so that a quality-of-service (QoS) router can prioritize all sessions from a particular client application," Brendel is describing that routing cookies that are not encrypted (so called "clear-text") would be used to route IP packets from a client, but does not say how or where those routing cookies would be generated.

Applicants submit that nowhere does Brendel describe that the load balancer itself determines the QoS values or, much less, that the load balancer or any other device would annotate a routing token with QoS values, transmit the annotated routing token to a client with a response message, or that the client QoS values would return the QoS values received in a routing token back to the load balancer with subsequent messages that are related to the response message from the server.

The Final Office Action further contends on page 3 that Col. 6, lines 9-25 of Brendel disclose <u>using determined TQoS values when transmitting</u> at least one of the related messages from a server computer to a client computer as a response related to a request message from the client computer. However, the cited portion of Brendel describes that the load balancer uses <u>server-assignment cookies</u> which are received with client requests <u>to route the requests to pre-assigned servers in the server farm</u>. Applicants submit that neither the cited portion of Brendel nor elsewhere does Brendel describe <u>using TQoS values determined by the load balancer when transmitting</u> at least one of the related messages from a server computer to a client computer as a response related to a request message from the client computer.

The Final Office Action further contends on page 3 that the same Col. 6, lines 9-25 of Brendel discloses annotating a routing token of the response message with information reflecting the determined TQoS values, and transmitting the response message with the annotated routing token with the information reflecting the determined TQoS values from the server computer to the

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client computer. However, the cited portion of Brendel describes that the load balancer annotates a response to a client request with a <u>server-assignment cookie that identifies which server within</u> the server farm that client's requests have been assigned. Applicants submit that neither the cited portion of Brendel nor elsewhere does Brendel describe annotating a routing token of the response message with information reflecting the determined TQoS values. Moreover, because Brendel does not describe annotation of a response with TQoS values for related messages, Brendel also cannot describe transmitting a response message with the annotated routing token with the <u>information reflecting the determined TQoS values</u> from the server computer to the client computer.

The Final Office Action further contends on page 3 that Col. 11, lines 35-45 of Brendel discloses transmitting the TQoS values obtained from the annotated routing token from the client computer to the server computer with subsequent request messages which are each related to the response message from the server. However, the cited portion of Brendel describes that the load balancer uses the server-assignment cookie, which is received with a client request, to route the client request to the previously assigned server within the server farm. Applicants submit that neither the cited portion of Brendel nor elsewhere does Brendel describe transmitting the TQoS values obtained from the annotated routing token from the client computer to the server computer with subsequent request messages which are each related to the response message from the server.

For at least these reasons, Applicants submit that the Final Office Action and Advisory Opinion have failed to establish that Brendel discloses the underlined recitations of Claim 1 and, consequently, have failed to provide show anticipation of Claim 1. Independent Claims 19 and 37 contain recitations that correspond to the method of Claim 1, and are not anticipated by Brendel for at least the reasons explained for Claim 1. The other claims are dependent claims that are patentable per the patentability of the independent claims from which they depend. Therefore, Applicants respectfully request that the present application be allowed.

Respectfully submitted,

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